

Aspergillus spp. have been reported to cause rhinitis in animals and humans (9,11,14,15). Hyphae have a typical morphological appearance (Figure 4). However, less common agents, such as other hyphomycetes, ideally need to be ruled out via culture. In this case, culture was not performed due to a miscommunication between the hospital and diagnostic personnel. Saprophytic infections are chronic and often remain localized with minimal invasion or destruction of the surrounding tissues. Invasion and spread into the surrounding tissues occasionally develop in immunocompromised humans (15). Sinus infections develop secondary to penetrating wounds and from inhalation, and as the infection becomes chronic, they may expand into the central nervous or respiratory systems.

In conclusion, computed tomography imaging determined the degree of infiltration and tissue changes in this animal. It is possible that early, appropriate, and aggressive antifungal therapy might have resulted in a more favorable outcome and resolution of the disease process.

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Book Review

Compte rendu de livre

Forensic Investigation of Animal Cruelty: A Guide for Veterinary and Law Enforcement Professionals

Sinclair L, Merck M, Lockwood R. Humane Society Press, Washington, DC, USA, 2006. 262 pp. ISBN 0-9748400-6-8. US\$59.95.

Recognizing and reporting abuse is important, not only because veterinarians are charged with the welfare of animals, but also due to the link between animal abuse and human violence. Veterinarians suspicious of animal abuse need to understand how to recognize the signs of abuse and document these cases. As society increasingly asks (or mandates) veterinarians to report animal abuse, it is crucial to have information and practical guidelines of what will be required. This authoritative book provides essential information and techniques that will help veterinarians to navigate the unfamiliar territory of forensic investigation and work with animal cruelty investigators and the legal profession in order to respond effectively in cases of animal abuse and neglect.

This book represents a major advance in the veterinary literature in this area. From definitions of animal cruelty, to introducing the legal processes involved in investigation and prosecution, to the particulars of collecting and documenting evidence, to common clinical presentations for different types of injuries in both living and deceased victims — the book provides a clinical and comprehensive guide for veterinarians who are faced with participating in an animal cruelty investigation. Because abused or neglected animals represent a wide range of clinical pictures, the authors make the case that the veterinary practitioner, who typically has a broad range of expertise and experience, is well-suited to evaluate animal cruelty victims, with the support of other veterinary and forensic experts.

The book can be divided into three general sections. Chapters 1 through 4 establish the context. Chapter 1 — What is Cruelty to Animals? — examines some of the questions that veterinarians ask (Is it cruel to punish a puppy for “accidents” during housetraining? How about tying up a dog in the backyard, with plenty of food and water but no companionship, for most of its life?) and then introduces definitions to help address

these questions. The chapter summarizes anti-cruelty legislation (with details of United States state provisions) and concludes with information on why cases are often not pursued through the courts but through education instead, particularly in cases of mild to moderate neglect, which represent the majority of cases of animal cruelty.

Chapter 2 — Investigators and Prosecutors of Cruelty to Animals — looks at who is responsible for the pursuit and prosecution of animal-cruelty crimes, and the roles of law enforcement and animal sheltering agencies.

Chapter 3 — The Veterinarian as an Investigator of Cruelty to Animals — discusses how veterinarians may become involved, from being asked to assist in the care of an animal that has been seized by the local humane society, to suspecting abuse in a case presented to the veterinarian's clinic. The authors stress that the most important step in an effective response is advance preparation for the possibility of abuse, and then address some practical questions, such as the responsibilities of a veterinarian who decides to participate in investigation of a case, the likely time and financial commitments, personal safety, and the possible effects of such participation on clinic business.

Chapter 4 — Testifying in Court — outlines how veterinarians may serve as either factual or expert witnesses, and the process and practical considerations of giving effective testimony.

The book moves into the specifics of forensic investigation in chapters 5 through 8. Chapter 5 — Collecting, Preserving, and Presenting the Findings — gives very practical guidelines on evidence, from recognizing and preserving different types to maintaining the chain-of-custody so that the evidence will stand up in court. The chapter includes helpful forms (e.g. evidence log, chain-of-custody form) and a detailed section on photographic evidence. Chapter 6, on examination of the crime scene, is directed more to law enforcement professionals; however, it is helpful for veterinarians to know what is involved.

Chapters 7 and 8, on examination of the surviving and deceased victim, respectively, are thorough and matter-of-fact. Veterinarians are accustomed to giving complete physical examinations; Chapter 7 outlines additional considerations in cases that are the result of cruelty or neglect. Chapter 8 has

information on establishing the time of death and comprehensive guidelines for necropsy. In this chapter, as in the rest of the book, the authors stress that the veterinary practitioner is not expected to be the expert in all areas, but that proper collection, handling, and documentation of the evidence by the veterinarian, for examination by other experts (such as the pathologist or the forensic entomologist), is crucial and can not be over-emphasized.

The last section (Chapters 9 to 20) provides the most common clinical presentations for different types of injuries in both living and deceased victims, including specific identifying features, what evidence to look for, and the challenges in diagnosis. Sample chapters are Thermal Injuries, Blunt Force Trauma, Projectile Injuries, Drowning, Poisoning, Dog Fighting and Cock Fighting, Animal Hoarding and Animal Sexual Assault. The book ends with a chapter on the future of veterinary forensics.

The collective expertise and experience of the authors is very strong. The book is well-written, with liberal use of relevant case examples. Legal concepts are explained clearly and succinctly. There is a section of color plates to demonstrate some particular concepts. I am surprised that the book contains no illustrative radiographs, considering that multiple fractures in different stages of healing are a cardinal sign of abuse. However, the importance of good quality radiographs is thoroughly addressed in the text.

The information on legislative statutes, in Chapters 1 (state animal cruelty provisions) and 3 (veterinary reporting laws and state regulation of confidentiality), is specific to the United States. For Canadian veterinarians, some similar information can be found on the CVMA Web site on animal abuse <http://canadianveterinarians.net/animal-abuse-reporting.aspx>

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